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EXAMINER	
TRUONG, CAM Y T	

ART UNIT	PAPER NUMBER
2169	

NOTIFICATION DATE	DELIVERY MODE
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	**Application No.**	**Applicant(s)**	
	10/686,124	BENJAMIN ET AL.	
	Examiner	**Art Unit**	
	Cam Y T. Truong	2169	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *13 March 2009*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,5,7-9,11 and 35-46* is/are pending in the application.
    4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5)☐ Claim(s) _____ is/are allowed.
6)☒ Claim(s) *1, 5, 7-9, 11, 35-46* is/are rejected.
7)☐ Claim(s) _____ is/are objected to.
8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.
10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.
    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
    a)☐ All b)☐ Some * c)☐ None of:
        1.☐ Certified copies of the priority documents have been received.
        2.☐ Certified copies of the priority documents have been received in Application No. _____.
        3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. Applicant has amended claims 1, 5, 7-9, 11, 35-44, and canceled claim 2-4, 6, 10, 12-34, and 47 in the amendment filed on 3/13/2009.

Claims 1, 5, 7-9, 11, 35-46 are pending in this office action.

Response to Arguments

2. Applicant's arguments with respect to claims 1, 5, 7-9, 11, 35-46 have been considered but are moot in view of the new ground(s) of rejection.

Claim Objections

3. Claims 5, 7-9, 11 are objected to because of the following informalities: the term “A method” should be written as “The method” since these claims depend on claim 1. Appropriate correction is required.

Specification

4. The specification is objected to under 37 CFR 1.75 (see MPEP 608.01(o)) because the phrase "computer readable medium" in claims 35-39 are not defined in the specification.

Remark: the term "storage device" in claims 35-39 is interpreted as a hardware device according to fig. 7 of the specification.

Claim Rejections - 35 USC § 101

5. 35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

6. Claims 35-39 are rejected under 35 U.S.C. 101 because the claims fail to place the invention squarely within one statutory class of invention. Applicant has failed to provide antecedent basis for the claim terminology "computer readable medium". Therefor, it would appear to be reasonable to interpret medium for carrying as fairly conveying signals and other forms of propagation to one of ordinary skill. As such, the claim is drawn to a form of energy. Energy is not one of the four categories of invention and therefore this claim(s) is/are not statutory. Energy is not a series of steps or acts and thus is not a process. Energy is not a physical article or object and as such is not a machine or manufacture. Energy is not a combination of substances and therefor not a composition of matter.

Claim Rejections - 35 USC § 112

7. The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

8. Claims 1, 5, 7-9, 11, 35-46 rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject

matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The added limitation “wherein the configuration parameter values provide data unique to the function of the one or more parts within the unit of manufacture” in claims 1, 35 and 40 was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The dependent claims 5, 7-9, 11, 36-39, 41-46 are rejected under the same reason as discussed in claims 1, 35 and 40.

9. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 8-9, 38-39 and 43 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The recited term “and/or” in claim claims 8, 38 and 43 is unclear whether "the interfaces are potential locations for electrical and mechanical connections between parts” or the interfaces are potential locations for electrical or mechanical connections between parts”.

Claims 9 is rejected under same reason as discussed in claim 8, 38 and 43.

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

11. Claims 1, 5, 7-9, 11, 35-44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Knoblock et al (USP 6023699) in view of Fisher et al (or hereinafter "Fisher") (US 6247128) and Nguyen et al (or hereinafter "Nguyen") (US 6202070).

As to claim 1, Knoblock teaches the claimed limitations:

"a computing system accessing a relational database to obtain configuration information regarding a unit of manufacture, the relational database comprising at least one location information lookup table, at least one parts information lookup table, and at least one unit storage table" as FIG. 4A is a flowchart depicting a process that can be used to create a shelf configuration, according to a preferred embodiment of the present invention. Specifically, this process is performed by the rackface tool 122, according to a preferred embodiment of the present invention. The process begins with step 404. In step 404, the user specifies a unique name for the new shelf configuration. Typically, this name must be unique in the database 108. In addition, values are specified for required fields. For example, in a preferred embodiment, required fields include a manufacture, an equipment class and an equipment subclass. Note that in a preferred embodiment, a value for manufacturer or `generic` is used for generic racks as previously described. Next, in step 406, a pick list is displayed to the user comprising a list of pre-defined components from the product catalog 126. Thus, components that have been created according to the process depicted in FIG. 6 are listed in step 406. Specifically, in this example, a list of shelf components are presented to the user. In a preferred embodiment, sort, find and filter options are provided to assist the user in finding a particular component listed in the product catalog 126. In any case, the user is prompted to select a particular shelf from the pick list presented in step 406 (col. 12, lines 23-46);

"the computing system retrieving configuration information on the unit of manufacture from at least a portion of the relational database" as retrieving information from the relational database (col. 13, lines 30-60). Wherein, the relational database 108 comprising tables that contains parts information and locations to place a part of a unit of manufacture (Figs. 10A-10h 9, lines 55-67; col. 22, lines 5-50);

"wherein said at least one parts information lookup table comprises entries for a plurality of parts usable in different types of units of manufactures" as entries for a plurality of parts usable in different types of units of manufactures (figs. 10C-10E, col. 9, lines 55-67; col. 22, lines 5-50),

"wherein said at least one location information lookup table comprises:

a list of available locations in the unit of manufacture to place a part from the at least one `parts information lookup table"` as list of available locations in the unit of manufacture to place a part from the at least one `parts information lookup table` Figs. 10A-10h 9, lines 55-67; col. 22, lines 5-50);

"wherein said at least one unit storage table specifies a configuration of the unit of manufacture and comprises: a unit parts list storage table containing information indicating a list of parts for the configuration of the unit of manufacture, and further containing, for each part in the list of parts, information usable to determine at least one location within the unit of manufacture at which that part can be placed" as one or more parts in said unit parts list storage table is assigned a location from said location definition lookup table (col. 12, lines 20-67);

"a unit parameter list storage table, containing information regarding configuration parameter values for one or more parts in the unit parts list storage table" as (col. 13, lines 30-60).

Knoblock does not explicitly teach the claimed limitations "information indicating, for each one of a plurality of available locations in the unit of manufacture, whether that location is required to be populated by a part; wherein the configuration parameter values provide data unique to the function of the one or more parts within the unit of manufacture".

Nguyen teaches the claimed limitation "information indicating, for each one of a plurality of available locations in the unit of manufacture, whether that location is required to be populated by a part" as the starting location and ending location include heads, cylinders, sectors (col. 17, lines 40-6). The primary partition starts at head 0, cylinder 2 and sector 1. At this location, the primary's bootsector will be found; this describes the specifics such as bytes per sector, sectors per cluster, number of FATs, number of root directory entries, number of sectors per FAT. With this information, the operating system can be located and loaded (col. 18, lines 1-40; col. 25, lines 1-30). The above information shows that heads, cylinders, sectors are presented as information indicating, for each location of locations in unit of manufacture, whether that location is required to be populated by a part.

Fisher teaches the claimed limitation "wherein the configuration parameter values provide data unique to the function of the one or more parts within the unit of manufacture" as the configuration parameter values provide identifiers or numbers or primary keys (col. 13-14). The serial number is used to identify the configuration in the CCP system and is entered to box as shown in figs. 7a-7c for retrieving and displaying (col. 30, lines 1-40).

It would have been obvious to a person of an ordinary skill in the art at the time the invention was made to apply Nguyen's teaching of heads, cylinders, sectors are presented as information indicating, for each location of locations in unit of manufacture, whether that location is required to be populated by a part and Fisher's teaching of the configuration parameter values provide identifiers or numbers or primary keys to a box for searching to Knoblock's system in order to allow a user to identify and store a particular equipment in proper location following user's desire and search parts of items in a relational database by using quickly by using unique numbers and further provide users with a means for placing configured racks from the configuration library in particular locations within remote sites.

As to claims 5, 36 and 41, Knoblock teaches the claimed limitation “wherein for a first part corresponding to an entry in said parts information lookup table, a part type lookup table in the relational database is usable to access information indicating a part type for the first part” as (as (col. 17, lines 15-50; col. 3, lines 15-50).

Knoblock does not explicitly teach the claimed limitation information indicating whether the first part is variable in size”.

Nguyen teaches the SizeMB field, when zero in value, indicates a partition that covers the whole drive (or rest of drive), whatever size that may be. Otherwise the value in this field reflects the size, in Megabytes, for the partition. Slot is the partition number (0 to 3)--this value cannot be NULL. This is the slot in the partition table (col. 17, lines 13-20).

It would have been obvious to a person of an ordinary skill in the art at the time the invention was made to apply Nguyen’s teaching of SizeMB field, when zero in value, indicates a partition that covers the whole drive (or rest of drive), whatever size that may be. Otherwise the value in this field reflects the size, in Megabytes, for the partition. Slot is the partition number (0 to 3)--this value cannot be NULL. This is the slot in the partition table to Knoblock’s system in order to store parts of data from assembled unit to factory line server quickly and efficiently and further allow the factory line servers to have lower storage capacity demands, thereby lowering the cost and increasing the speed of the distribution process.

As to claims 7, 37 and 42, Knoblock teaches the claimed limitations “wherein said unit parts list storage table is related to a processor group storage table in the relational database that is usable to access: information indicating that a group of parts is associated with a processor listed in the unit parts list storage table; information indicating that the processor and group of parts are associated with a particular operating system” as as (col. 17, lines 15-50).

As to claims 8, 38 and 43, Knoblock, Fish and Nguyen teach the claimed limitation “wherein the relational database further comprises an interface definition lookup table , wherein said interface definition lookup table defines interfaces for a plurality of parts in the parts information lookup table” as (Knoblock, col. 17, lines 15-50), “wherein the interfaces are potential locations for electrical and/or mechanical connections between parts” (Nguyen, fig. 8A, 16A, col. 24, lines 1-5-55).

As to claim 9, Knoblock teaches the claimed limitation “wherein said interface definition lookup table is related to an interface family lookup table in the relational database, wherein the interface family lookup table is usable to access information identifying compatible mating connections of said plurality of parts in the parts information lookup table” as (col. 17, lines 15-50).

As to claims 11, 39 and 44, Knoblock teaches the claimed limitation “wherein said the relational database further comprises a parameter list lookup table and a parameter description look up table that are usable to access information indicating for defining multiple groups of parameters, which allow multiple pre-defined configurations of a part listed in the unit parts list storage table" as (col. 13, lines 45-67; col. 14, lines 1-40).

Claim 35 is rejected under same reason as discussed in claim 1. Knoblock teaches an article of manufacture including a computer-readable medium having instructions stored thereon that, if executed by a computing device, cause the computing device to perform a method comprising" as a medium includes instructions that is executed by a device to perform a method (abstract, col. 25, lines 10-30).

As to claim 40, Knoblock teaches a computing device (fig. 9) comprising:

"a processor" as a processor (fig.9); and

"a storage device coupled to the processor" as storage device coupled to a processor (fig. 9);

"wherein the storage device stores relational database software executable by the processor to" as storage device store software executed by the processor (fig. 9, col. 25, lines 10-30);

"maintain a relational database usable to access information regarding a unit of manufacture" as modifying a relational database to access information regarding a unit of manufacture (abstract, fig. 5, col. 14, lines 1-40);

“ the relational database comprising at least one location information lookup table, at least one parts information lookup table, and at least one unit storage table” as the relational database comprising at least one location information lookup table, at least one parts information lookup table, and at least one unit storage table Figs. 10A-10h col. 9, lines 55-67; col. 22, lines 5-50),

“wherein the at least one location information lookup table comprises:
a list of available locations in the unit of manufacture to place a part from the at least one parts information lookup table” as list of available locations in the unit of manufacture to place a part from the at least one parts information lookup table Figs. 10A-10h 9, lines 55-67; col. 22, lines 5-50);

“wherein the at least one parts information lookup table comprises entries for a plurality of parts usable in different types of units of manufactures” as as entries for a plurality of parts usable in different types of units of manufactures (figs. 10C-10E, col. 9, lines 55-67; col. 22, lines 5-50),

“wherein the at least one unit storage table specifies a configuration of the unit of manufacture and comprises: a unit parts list storage table containing information indicating a list of parts for the configuration of the unit of manufacture, and further containing, for each part in the list of parts, information usable to determine at least one location within the unit of manufacture at which that part can be placed” as one or more parts in said unit parts list storage table is assigned a location from said location definition lookup table (col. 12, lines 20-67);

“a unit parameter list storage table containing information regarding configuration parameter values for one or more parts in the unit parts list storage table” as (col. 13, lines 30-60).

Knoblock does not explicitly teach the claimed limitations “information indicating, for each one of a plurality of available locations in the unit of manufacture, whether that location is required to be populated by a part; wherein the configuration parameter values provide data unique to the function of the one or more parts within the unit of manufacture”.

Nguyen teaches the claimed limitation “information indicating, for each one of a plurality of available locations in the unit of manufacture, whether that location is required to be populated by a part” as the starting location and ending location include heads, cylinders, sectors (col. 17, lines 40-6). The primary partition starts at head 0, cylinder 2 and sector 1. At this location, the primary's bootsector will be found; this describes the specifics such as bytes per sector, sectors per cluster, number of FATs, number of root directory entries, number of sectors per FAT. With this information, the operating system can be located and loaded (col. 18, lines 1-40; col. 25, lines 1-30). The above information shows that heads, cylinders, sectors are presented as information indicating, for each location of locations in unit of manufacture, whether that location is required to be populated by a part.

Fisher teaches the claimed limitation “wherein the configuration parameter values provide data unique to the function of the one or more parts within the unit of manufacture” as the configuration parameter values provide identifiers or numbers or primary keys (col. 13-14). The serial number is used to identify the configuration in the CCP system and is entered to box as shown in figs. 7a-7c for retrieving and displaying (col. 30, lines 1-40).

It would have been obvious to a person of an ordinary skill in the art at the time the invention was made to apply Nguyen's teaching of heads, cylinders, sectors are presented as information indicating, for each location of locations in unit of manufacture, whether that location is required to be populated by a part and Fisher's teaching of the configuration parameter values provide identifiers or numbers or primary keys to a box for searching to Knoblock's system in order to allow a user to identify and store a particular equipment in proper location following user's desire and search parts of items in a relational database by using quickly by using unique numbers and further provide users with a means for placing configured racks from the configuration library in particular locations within remote sites.

12. Claim 45 is rejected under 35 U.S.C. 103(a) as being unpatentable over as being unpatentable over Knoblock et al (USP 6023699) in view of Fisher et al (or hereinafter "Fisher") (US 6247128) and Nguyen et al (or hereinafter "Nguyen") (US 6202070) further in view Rivette et al (or hereinafter "Rivette") (US 6339767)

As to claim 45, Knoblock does not explicitly teach the claimed limitation "assembling the unit of manufacture in accordance with the configuration information in the relational database". Rivette teaches assembling the unit of manufacture in accordance with the configuration information in the relational database (col. 71,lines 35-45).

It would have been obvious to a person of an ordinary skill in the art at the time the invention was made to apply Rivette's teaching of assembling the unit of manufacture in accordance with the configuration information in the relational database to Knoblock's system in order to allow a user to identify and build a particular equipment following user's desire and search parts of items in a relational database by using quickly by using indexes and BOM tables and further provide users with a means for placing configured racks from the configuration library in particular locations within remote sites.

13. Claim 46 is rejected under 35 U.S.C. 103(a) as being unpatentable over Knoblock et al (USP 6023699) in view Fisher et al (or hereinafter "Fisher") (US 6247128), Nguyen and further in view of Rivette et al (or hereinafter "Rivette") (US 6339767 and Chang et al (or hereinafter "Chang") (US 6061515).

As to claim 46, Knoblock does not explicitly teach the claimed limitation "testing the assembled unit of manufacture in accordance with the configuration information in the relational database".

Chang teaches testing mapping objects into a relational database (col. 6, lines 25-40; col. 9, lines 45-55).

It would have been obvious to a person of an ordinary skill in the art at the time the invention was made to apply Chang's teaching of testing mapping objects into a relational database to Knoblock's system in order to reduce risk when storing data into a relational database.

14. Claims 1, 5, 7-9, 11, 35-45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Knoblock et al (USP 6023699) in view of Rivette et al (or hereinafter "Rivette") (US 6339767) and Nguyen et al (or hereinafter "Nguyen") (US 6202070).

As to claim 1, Knoblock teaches the claimed limitations:

"a computing system accessing a relational database to obtain configuration information regarding a unit of manufacture, the relational database comprising at least one location information lookup table, at least one parts information lookup table, and at least one unit storage table" as FIG. 4A is a flowchart depicting a process that can be used to create a shelf configuration, according to a preferred embodiment of the present invention. Specifically, this process is performed by the rackface tool 122, according to a preferred embodiment of the present invention. The process begins with step 404. In step 404, the user specifies a unique name for the new shelf configuration. Typically, this name must be unique in the database 108. In addition, values are specified for required fields. For example, in a preferred embodiment, required fields include a manufacture, an equipment class and an equipment subclass. Note that in a preferred embodiment, a value for manufacturer or `generic` is used for generic racks as previously described. Next, in step 406, a pick list is displayed to the user comprising a list of pre-defined components from the product catalog 126. Thus, components that have been created according to the process depicted in FIG. 6 are listed in step 406.

Specifically, in this example, a list of shelf components are presented to the user. In a preferred embodiment, sort, find and filter options are provided to assist the user in finding a particular component listed in the product catalog 126. In any case, the user is prompted to select a particular shelf from the pick list presented in step 406 (col. 12, lines 23-46);

"the computing system retrieving configuration information on the unit of manufacture from at least a portion of the relational database" as retrieving information from the relational database (col. 13, lines 30-60). Wherein, the relational database 108 comprising tables that contains parts information and locations to place a part of a unit of manufacture (Figs. 10A-10h 9, lines 55-67; col. 22, lines 5-50);

"wherein said at least one parts information lookup table comprises entries for a plurality of parts usable in different types of units of manufactures" as entries for a plurality of parts usable in different types of units of manufactures (figs. 10C-10E, col. 9, lines 55-67; col. 22, lines 5-50),

"wherein said at least one location information lookup table comprises:

a list of available locations in the unit of manufacture to place a part from the at least one `parts information lookup table"` as list of available locations in the unit of manufacture to place a part from the at least one `parts information lookup table` Figs. 10A-10h 9, lines 55-67; col. 22, lines 5-50);

"wherein said at least one unit storage table specifies a configuration of the unit of manufacture and comprises: a unit parts list storage table containing information indicating a list of parts for the configuration of the unit of manufacture, and further containing, for each part in the list of parts, information usable to determine at least one location within the unit of manufacture at which that part can be placed" as one or more parts in said unit parts list storage table is assigned a location from said location definition lookup table (col. 12, lines 20-67);

“a unit parameter list storage table, containing information regarding configuration parameter values for one or more parts in the unit parts list storage table” as (col. 13, lines 30-60).

Knoblock does not explicitly teach the claimed limitations “information indicating, for each one of a plurality of available locations in the unit of manufacture, whether that location is required to be populated by a part; wherein the configuration parameter values provide data unique to the function of the one or more parts within the unit of manufacture”.

Nguyen teaches the claimed limitation “information indicating, for each one of a plurality of available locations in the unit of manufacture, whether that location is required to be populated by a part” as the starting location and ending location include heads, cylinders, sectors (col. 17, lines 40-6). The primary partition starts at head 0, cylinder 2 and sector 1. At this location, the primary's bootsector will be found; this describes the specifics such as bytes per sector, sectors per cluster, number of FATs, number of root directory entries, number of sectors per FAT. With this information, the operating system can be located and loaded (col. 18, lines 1-40; col. 25, lines 1-30). The above information shows that heads, cylinders, sectors are presented as information indicating, for each location of locations in unit of manufacture, whether that location is required to be populated by a part.

Rivette teaches the claimed limitation "wherein the configuration parameter values provide data unique to the function of the one or more parts within the unit of manufacture" as the configuration parameter values provide identifiers. The identifiers are used to identify patents and are entered to box as shown in figs. 53-57 for retrieving and displaying (col. 47, lines 50-65; col. 91, lines 45-67).

It would have been obvious to a person of an ordinary skill in the art at the time the invention was made to apply Nguyen's teaching of heads, cylinders, sectors are presented as information indicating, for each location of locations in unit of manufacture, whether that location is required to be populated by a part and Rivette's teaching of the configuration parameter values provide identifiers. The identifiers are used to identify patents and are entered to box as shown in figs. 53-57 for retrieving and displaying to Knoblock's system in order to allow a user to identify and store a particular equipment in proper location following user's desire and search parts of items in a relational database by using quickly by using unique numbers and further provide users with a means for placing configured racks from the configuration library in particular locations within remote sites.

As to claims 5, 36 and 41, Knoblock teaches the claimed limitation "wherein for a first part corresponding to an entry in said parts information lookup table, a part type lookup table in the relational database is usable to access information indicating a part type for the first part" as (as (col. 17, lines 15-50; col. 3, lines 15-50).

Knoblock does not explicitly teach the claimed limitation information indicating whether the first part is variable in size".

Nguyen teaches the SizeMB field, when zero in value, indicates a partition that covers the whole drive (or rest of drive), whatever size that may be. Otherwise the value in this field reflects the size, in Megabytes, for the partition. Slot is the partition number (0 to 3)--this value cannot be NULL. This is the slot in the partition table (col. 17, lines 13-20).

It would have been obvious to a person of an ordinary skill in the art at the time the invention was made to apply Nguyen's teaching of SizeMB field, when zero in value, indicates a partition that covers the whole drive (or rest of drive), whatever size that may be. Otherwise the value in this field reflects the size, in Megabytes, for the partition. Slot is the partition number (0 to 3)--this value cannot be NULL. This is the slot in the partition table to Knoblock's system in order to store parts of data from assembled unit to factory line server quickly and efficiently and further allow the factory line servers to have lower storage capacity demands, thereby lowering the cost and increasing the speed of the distribution process.

As to claims 7, 37 and 42, Knoblock teaches the claimed limitations "wherein said unit parts list storage table is related to a processor group storage table in the relational database that is usable to access: information indicating that a group of parts is associated with a processor listed in the unit parts list storage table; information indicating that the processor and group of parts are associated with a particular operating system" as as (col. 17, lines 15-50).

As to claims 8, 38 and 43, Knoblock, Fish and Nguyen teach the claimed limitation "wherein the relational database further comprises an interface definition lookup table , wherein said interface definition lookup table defines interfaces for a plurality of parts in the parts information lookup table" as (Knoblock, col. 17, lines 15-50), "wherein the interfaces are potential locations for electrical and/or mechanical connections between parts" (Nguyen, fig. 8A, 16A, col. 24, lines 1-5-55).

As to claim 9, Knoblock teaches the claimed limitation "wherein said interface definition lookup table is related to an interface family lookup table in the relational database, wherein the interface family lookup table is usable to access information identifying compatible mating connections of said plurality of parts in the parts information lookup table" as (col. 17, lines 15-50).

As to claims 11, 39 and 44, Knoblock teaches the claimed limitation "wherein said the relational database further comprises a parameter list lookup table and a parameter description look up table that are usable to access information indicating for defining multiple groups of parameters, which allow multiple pre-defined configurations of a part listed in the unit parts list storage table" as (col. 13, lines 45-67; col. 14, lines 1-40).

Claim 35 is rejected under same reason as discussed in claim 1. Knoblock teaches an article of manufacture including a computer-readable mediumhaving instructions stored thereon that, if executed by a computing device, cause the computing device to perform a method comprising" as a medium includes instructions that is executed by a device to perform a method (abstract, col. 25, lines 10-30).

As to claim 40, Knoblock teaches a computing device (fig. 9) comprising:

"a processor" as a processor (fig.9); and

"a storage device coupled to the processor" as storage device coupled to a processor (fig. 9);

"wherein the storage device stores relational database software executable by the processor to" as storage device store software executed by the processor (fig. 9, col. 25, lines 10-30);

"maintain a relational database usable to access information regarding a unit of manufacture" as modifying a relational database to access information regarding a unit of manufacture (abstract, fig. 5, col. 14, lines 1-40);

" the relational database comprising at least one location information lookup table, at least one parts information lookup table, and at least one unit storage table" as the relational database comprising at least one location information lookup table, at least one parts information lookup table, and at least one unit storage table Figs. 10A-10h col. 9, lines 55-67; col. 22, lines 5-50),

"wherein the at least one location information lookup table comprises: a list of available locations in the unit of manufacture to place a part from the at least one parts information lookup table" as list of available locations in the unit of manufacture to place a part from the at least one parts information lookup table Figs. 10A-10h 9, lines 55-67; col. 22, lines 5-50);

"wherein the at least one parts information lookup table comprises entries for a plurality of parts usable in different types of units of manufactures" as as entries for a plurality of parts usable in different types of units of manufactures (figs. 10C-10E, col. 9, lines 55-67; col. 22, lines 5-50),

"wherein the at least one unit storage table specifies a configuration of the unit of manufacture and comprises: a unit parts list storage table containing information indicating a list of parts for the configuration of the unit of manufacture, and further containing, for each part in the list of parts, information usable to determine at least one location within the unit of manufacture at which that part can be placed" as one or more parts in said unit parts list storage table is assigned a location from said location definition lookup table (col. 12, lines 20-67);

"a unit parameter list storage table containing information regarding configuration parameter values for one or more parts in the unit parts list storage table" as (col. 13, lines 30-60).

Knoblock does not explicitly teach the claimed limitations “information indicating, for each one of a plurality of available locations in the unit of manufacture, whether that location is required to be populated by a part; wherein the configuration parameter values provide data unique to the function of the one or more parts within the unit of manufacture”.

Nguyen teaches the claimed limitation “information indicating, for each one of a plurality of available locations in the unit of manufacture, whether that location is required to be populated by a part” as the starting location and ending location include heads, cylinders, sectors (col. 17, lines 40-6). The primary partition starts at head 0, cylinder 2 and sector 1. At this location, the primary's bootsector will be found; this describes the specifics such as bytes per sector, sectors per cluster, number of FATs, number of root directory entries, number of sectors per FAT. With this information, the operating system can be located and loaded (col. 18, lines 1-40; col. 25, lines 1-30). The above information shows that heads, cylinders, sectors are presented as information indicating, for each location of locations in unit of manufacture, whether that location is required to be populated by a part.

Rivette teaches the claimed limitation “wherein the configuration parameter values provide data unique to the function of the one or more parts within the unit of manufacture” as the configuration parameter values provide identifiers. The identifiers are used to identify patents and are entered to box as shown in figs. 53-57 for retrieving and displaying (col. 47, lines 50-65; col. 91, lines 45-67).

It would have been obvious to a person of an ordinary skill in the art at the time the invention was made to apply Nguyen's teaching of heads, cylinders, sectors are presented as information indicating, for each location of locations in unit of manufacture, whether that location is required to be populated by a part and Rivette's teaching of the configuration parameter values provide identifiers. The identifiers are used to identify patents and are entered to box as shown in figs. 53-57 for retrieving and displaying to Knoblock's system in order to allow a user to identify and store a particular equipment in proper location following user's desire and search parts of items in a relational database by using quickly by using unique numbers and further provide users with a means for placing configured racks from the configuration library in particular locations within remote sites.

As to claim 45, Knoblock does not explicitly teach the claimed limitation "assembling the unit of manufacture in accordance with the configuration information in the relational database". Rivette teaches assembling the unit of manufacture in accordance with the configuration information in the relational database (col. 71,lines 35-45).

It would have been obvious to a person of an ordinary skill in the art at the time the invention was made to apply Rivette's teaching of assembling the unit of manufacture in accordance with the configuration information in the relational database to Knoblock's system in order to allow a user to identify and build a particular equipment following user's desire and search parts of items in a relational database by using quickly by using indexes and BOM tables and further provide users with a means for placing configured racks from the configuration library in particular locations within remote sites.

15. Claim 46 is rejected under 35 U.S.C. 103(a) as being unpatentable over Knoblock et al (USP 6023699) in view of Rivette et al (or hereinafter "Rivette") (US 6339767) and Nguyen and further in view of Chang et al (or hereinafter "Chang") (US 6061515).

As to claim 46, Knoblock does not explicitly teach the claimed limitation "testing the assembled unit of manufacture in accordance with the configuration information in the relational database".

Chang teaches testing mapping objects into a relational database (col. 6, lines 25-40; col. 9, lines 45-55).

It would have been obvious to a person of an ordinary skill in the art at the time the invention was made to apply Chang's teaching of testing mapping objects into a relational database to Knoblock's system in order to reduce risk when storing data into a relational database.

Contact Information

16. It would have been obvious to a person of an ordinary skill in the art at the time the invention was made to apply Chang's teaching of testing mapping objects into a relational database to Knoblock's system in order to reduce risk when storing data into a relational database.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cam Y T. Truong whose telephone number is (571) 272-4042. The examiner can normally be reached on Monday to Firday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tony Mahmoudi can be reached on (571) 272-4078. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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/Cam Y Truong/
Primary Examiner, Art Unit 2169